

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,897	01/16/2002	Shi Baw Ch'ng	12144-010001	9091
26161 7590 12/29/2006 FISH & RICHARDSON PC P.O. BOX 1022			EXAMINER	
			ALAM, UZMA	
MINNEAPOLIS, MN 55440-1022			ART UNIT	PAPER NUMBER
•			2157	
SHORTENED STATUTO	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		12/29/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	,	Application No.	Applicant(s)	 			
Office Action Summary		10/052,897	CH'NG, SHI BAV	CH'NG, SHI BAW			
		Examiner	Art Unit				
		Uzma Alam	2157				
Period fo	The MAILING DATE of this communication or Reply	appears on the cover she	et with the correspondence ac	idress			
WHI(- Exte after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING ansions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by streply received by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b).	ODATE OF THIS COMM R 1.136(a). In no event, however, n riod will apply and will expire SIX (6 ratute, cause the application to beco	IUNICATION. nay a reply be timely filed i) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133).	,			
Status							
1) 又	Responsive to communication(s) filed on 1	6 October 2006					
· · · ·	This action is FINAL. 2b) ☐ This action is non-final.						
3)	<i>,</i> —	e this application is in condition for allowance except for formal matters, prosecution as to the merits is					
٥,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
or in the contract of the cont							
	Claim(s) 1-6,8 and 10-14 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed.						
•	6)⊠ Claim(s) <u>1-6,8 and 10-14</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)	Claim(s) are subject to restriction ar	nd/or election requiremen	+ :				
·	•	ia/or election requiremen	t.				
Applicat	on Papers						
9)[The specification is objected to by the Exan	niner.					
10) \boxtimes The drawing(s) filed on <u>16 January 2002</u> is/are: a) \boxtimes accepted or b) \square objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)	The oath or declaration is objected to by the	e Examiner. Note the atta	ched Office Action or form P7	ΓΟ-152.			
Priority (ınder 35 U.S.C. § 119			•			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(s)						
	e of References Cited (PTO-892)	4) Interv	view Summary (PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	r No(s)/Mail Date					
) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:						
, upc		o, C other	· •				

Application/Control Number: 10/052,897

Art Unit: 2157

DETAILED ACTION

This action is responsive to the amendment filed October 16, 2006. Claims 1, 5, 6, 10, 11, 13 and 14 have been amended. Claim 7 is cancelled. Claims 1-6, 8, 10-14 are pending.

Claims 1-6, 8, 10-14 represent a system for managing network faults.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 1. Claims 1-6, 8, 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Chirashnya et al. US Patent No. 7, 113,988. Chirashnya teaches the invention as claimed including a method for diagnosing faults and alarms on a causal network (see abstract).
- 2. As per claim 1 and 10, Chirashnya teaches a method comprising and an apparatus comprising a network element having

processing information to identify network faults that cause or are caused by other network faults that contribute to a failure of a network element in which at least some of the network faults are occurring (agents gather systems events on a causal network and send the

Art Unit: 2157

events to an event collector; column 3, lines 17-30, column 7, lines 54-65; column 8, lines 50-65; column 15, lines 29-45);

based on the results of the information processing, generating traps with respect to fewer than all of the network faults that are occurring (alarms are generated with each event; column 9, lines 46-49; column 10, lines 6-20; column 13, lines 1-10); and

sending the traps to a network management station (events are sent to the primary event collector 32 running on the primary node 26; column 7, lines 54-65; column 10, lines 6-20).

- 3. As per claim 2, Chirashnya teaches the method and apparatus of claim 1 in which the information is processed using a directed acyclic graph (diagnosing the system using Bayesian Network with is a directed acyclic graph; column 2, lines 9-59; column 3, lies 9-14; column 8, lines 50-65; column 15, liens 29-45).
- 4. As per claim 3, Chirashnya teaches the method of claim 2 in which nodes of the graph represent entities of the network element (each module is represented in the diagnosis; column 8, lines 38-50).
- 5. As per claim 4, Chirashnya teaches the method of claim 1in which the result of the processing comprises information about the causal relationships among at least some of the network faults (determining how one alarm is related to other alarms occurring on the system; column 12, lines 1-25; column 13, lines 54-67; column 12, lines 1-21; column 15, lines 29-56)

Art Unit: 2157

- 6. As per claim 5, Chirashnya teaches the method of claim 1 in which traps are generated with respect to network faults that have a relationship to other network faults and traps are not generated with respect to at least some of the other network faults (column 9, lines 46-49; column 13, lines 1-10; column 15, lies 59-67).
- 7. As per claim 6, Chirashnya teaches the method of claim 1 also including requesting fault information from an entity that is part of the network element and which has not triggered a fault notice to determine if there is a network fault associated with the network element (column 13, lines 54-67; column 14, lines 1-21; column 15, lines 59-67).
- 8. As per claim 8, Chirashnya teaches the method of claim 7 also including reporting the traps to an operator of the network management station (information communicated via user interface 54; column 9, lines 54-61).
- 9. As per claim 11, Chirashnya teaches a medium bearing information capable of configuring a machine determine network faults cause or are caused by other network faults occurring in entities of a network element (determining how one alarm is related to other alarms occurring on the system; column 12, lines 1-25; column 13, lines 54-67; column 12, lines 1-21; column 15, lines 29-56).
- 10. As per claim 12, Chirashnya teaches the medium of claim 11 in which the information comprises a directed acyclic graph of nodes (diagnosing the system using Bayesian Network

Art Unit: 2157

with is a directed acyclic graph; column 2, lines 9-59; column 3, lies 9-14; column 8, lines 50-65; column 15, lines 29-45).

11. As per claim 13, Chirashnya teaches a method comprising:

Using a directed acyclic graph that models causal relationships between network fault objects to process information about network faults that contribute to a failure of a network element in which at least some of the network faults are occurring (agents gather systems events on a causal network and send the events to an event collector; column 3, lines 17-30, column 7, lines 54-65; column 8, lines 50-65; column 15, lines 29-45);

based on the results of the information processing, generating traps with respect to fewer than all of the network faults that are occurring (alarms are generated with each event; column 9, lines 46-49; column 10, lines 6-20; column 13, lines 1-10); and

sending the traps to a network management station (events are sent to the primary event collector 32 running on the primary node 26; column 7, lines 54-65; column 10, lines 6-20).

12. As per claim 14, Chirashnya teaches the apparatus of claim 10 wherein one network fault directly causes another network fault or is directly caused by another network fault (determining how one alarm is related to other alarms occurring on the system; column 12, lines 1-25; column 13, lines 54-67; column 12, lines 1-21; column 15, lines 29-56).

Response to Arguments

13. Applicant's arguments with respect to claims 1-6, 8, 10-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (571) 272-3995. The examiner can normally be reached on Monday-Tuesday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/052,897

Art Unit: 2157

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Uzma alam Ua December 8, 2006

SUPERVISORY PATENT EXAMINER